

AIR COMMAND AND STAFF COLLEGE

AIR UNIVERSITY

**SECURING SUPPLY AND DEMAND: NATURAL GAS PIPELINES AND THE
EUROPE-RUSSIA RELATIONSHIP**

by

Gregory T. Pound, Major, USAF

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Advisor: Dr. Edwina S. Campbell

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1. INTRODUCTION

The supply of natural gas to Europe from Russia is an enormously complex undertaking that has publicly negative consequences when disrupted. This has been headlined each winter for the last four years as pricing disputes between Russia, Belarus, and Ukraine have triggered Russian supply cutoffs to pipelines that supply Europe. Each time this reignites European interest in reducing dependence on Russia for natural gas. As Europe seeks a stable supply of gas, Russia seeks a stable demand for gas.¹ On the surface these goals seem to be mutually reinforcing, but pricing disputes with Ukraine are not the only complicating factor. Although these factors are numerous, the majority are closely related to the system of current and planned natural gas pipelines for feeding Europe and to the complexities of the Europe-Russia relationship. The Nord Stream pipeline from Russia direct to Germany now appears almost unstoppable, so a united effort by Europe to ensure the completion of the Nabucco pipeline will be important to reduce this dependence and enable Europe to achieve more of its foreign policy goals and energy security goals while also improving relations with Russia.

2. NORD STREAM

The issue that garners the most attention for its potential to change where Europe's natural gas comes from is the development of new gas pipelines. The plans for an undersea pipeline called Nord Stream, going from the Russian Baltic port of Vyborg to Greifswald, Germany, have been particularly contentious. The EU gets 80% of its Russian natural gas through Ukraine.² In the eyes of many Europeans, the fact that Nord Stream would bypass Ukraine is a positive that might reduce the amount of Europe's gas that is subject to supply disruptions. However, there has been plenty of opposition to the pipeline. Any gas that goes through Nord Stream instead of Eastern Europe could reduce transit fees paid by Russia to those

countries, and will give Russia the ability to cut off some of the gas supplies to the eastern transit countries without cutting off all of the gas to Europe.³ Another downside is that even though the eastern European countries are bypassed, Nord Stream will make Germany and subsequently Europe more dependent on Russian gas. In addition, Baltic littoral countries, particularly Sweden and Finland, initially refused to give permission for the pipeline to transit their exclusive economic zones in the Baltic due to environmental concerns.⁴

In spite of the conflicts surrounding Nord Stream, its eventual completion now seems almost inevitable. After recent studies determined that the pipeline's negative environmental impacts would be relatively small and short-term, Finland and Sweden approved the project.⁵ While the US continues to support European efforts to lessen dependence on Russian gas, US opposition to Nord Stream in 2008 has been replaced by the Obama administration's focus on engagement with Russia in 2009.⁶ The pipeline is also gaining some economic momentum, as evidenced by the ongoing attempt of GDF Suez SA, a French energy company, to buy part of Germany's BASF SE/Wintershall Holding AG stake in Nord Stream.⁷ These developments combined with the European desire to insulate itself from Eastern Europe's gas supply disruptions are stronger than the desire to lessen dependence on Russian gas – at least when looking at Nord Stream. Other pragmatic considerations may also be at play here. While the numbers from different sources vary, it seems likely that the European demand for natural gas will continue to rise for the foreseeable future, even though demand has slackened during the global economic downturn. Since Russia has many more gas reserves than all of Europe and the former Soviet republics combined,⁸ in the long run Europe is likely to need more Russian gas coming through pipelines like Nord Stream.

3. THE SOUTHERN PIPELINES

While the options for which pathway natural gas will take to reach Europe are fairly well established, they are only part of the equation. Much of Europe's natural gas already does or will come from countries to the south and east and must cross the Black Sea, Turkey, or the Mediterranean. The variety of routes that natural gas can take is complicated not only by geography, but also by the many potential sources of the gas. Iraq, Iran, Turkmenistan, Kazakhstan, Azerbaijan, and Russia are all positioning themselves to be part of the solution. Plans are underway for multiple pipelines to transport south Asian gas to Europe, with some already completed, but they are probably not all feasible in the short-term. If Europe wants to reduce its dependence on gas coming from Russia, it must be involved in supporting the non-Russian options. This will be a long and complicated process in which Europe will need to take a leadership role in if it wants to influence the outcome.

The major "non-Russian" gas pipelines are the already functioning South Caucasus Pipeline (SCP), and the planned trans-Caspian and Nabucco pipelines. These pipelines would be able to work together to bring gas all the way from south Asia to Europe. Since the opposition to Nord Stream seems to be on the decline, these three need to succeed just to counterbalance the increased dependence on Russia that Nord Stream represents. All three of these are necessary to provide Europe with a sustained diversification away from Russian sources of natural gas.

The SCP is already functioning and connects the western edge of the Caspian Sea in Azerbaijan to Turkey. The SCP is important to Nabucco for two reasons. The first is that it provides an easy path for Azeri gas to reach Nabucco.⁹ The second is that SCP will provide a link between the gas from Kazakhstan and Turkmenistan to Nabucco. The SCP thus provides a non-Russian bridge to connect the gas of Azerbaijan, Turkmenistan, and Kazakhstan to Nabucco and Europe.

The main problem facing the supporters of Nabucco is how to secure the gas necessary to fill the pipeline. Almost without exception, in any country that Nabucco planned to get gas from those plans have been frustrated by political disputes, Russian interference, or both. For example, an important element of the plan to build Nabucco was the availability of significant quantities of Azeri natural gas to supply the initial stages of the pipeline,¹⁰ but the willingness of Azerbaijan to supply the gas is now in question. The spillover from the border dispute between Azerbaijan and Armenia into Azeri-Turkish political relations is the most obvious source of the problem. Azerbaijan recently threatened to not provide gas for Nabucco due to a 2009 agreement between Turkey and Armenia to resume diplomatic relations and open borders in spite of the continuing Armenian occupation of Nagorno-Karabakh.¹¹ Perhaps not coincidentally, Azerbaijan also recently agreed to sell some of its gas to Russia.¹² This is an example of Russian attempts to monopolize the supply of gas to Europe not only through the use pipelines, but also by gaining control of access to non-Russian sources of gas at every opportunity. When Azerbaijan agreed to sell the gas to Russia, it also said that it still can provide gas for Nabucco.¹³ However, even if these troubles can be overcome and Azerbaijan does supply gas for Nabucco, Azerbaijan's reserves are only anticipated to be large enough for the first stages of the project.¹⁴ This leaves Nabucco looking to the south and the east for additional gas sources to fill its pipeline.

The next big potential source of enough gas to make Nabucco viable is Iran.¹⁵ In this case, it is primarily the politics that are giving Nabucco's backers headaches. As part of the US support for economic measures to dissuade Iran from pursuit of nuclear weapons, it is opposing the use of Iranian gas in Nabucco.¹⁶ This attitude appears to be matched by that of Europe. For example, German foreign minister Guido Westerwelle recently expressed support for additional sanctions on Iran over Iran's nuclear program.¹⁷ Of course Russia wants its own pipelines to

prevent Nabucco or to make it irrelevant, so for the time being there should be agreement between Russia and Europe that Iran should be kept out of Nabucco. An agreement to allow Iran to provide gas to Nabucco could be incentive for Iran to cooperate with the UN on Iran's nuclear program, but until that situation is resolved Iran will not be a viable option for Nabucco.¹⁸

Along with Azerbaijan, the least politically complicated option for supplying gas to Nabucco is probably Iraq. The lack of a geographic connection between Russia and Iraq is helpful, but a Nabucco – Iraq connection is still not certain. While the US and Europe would be happy to see Nabucco receiving gas from Iraq, the governments of Iraq and Turkey are not always so sure. This is because the main Iraqi reserves are in the Kurdish part of northern Iraq.¹⁹ Traditional distrust of the Kurds in both governments was most evident earlier this year when the Iraqi government cancelled an EU backed plan to pump gas from the Kurdish part of Iraq to Turkey.²⁰ Fortunately, a short time later Iraqi Prime Minister Nouri al-Maliki announced that Iraq can supply as much as half of Nabucco's gas,²¹ and his government gave export licenses to two Kurdish projects.²² These developments are promising, but the amount of gas truly available from Iraq is still uncertain.²³ It still seems likely that even if Azerbaijan does eventually provide the gas to get the pipeline started, and Iraq can provide half of the longer term volume, there will still be a need for other gas fields to provide the balance.

The remainder of the gas to fill Nabucco is then likely to have to come from Kazakhstan and Turkmenistan. This option has great potential, particularly in light of recent estimates that Turkmenistan's gas reserves could be as large as half of Russia's.²⁴ However, the political and economic difficulties involved in getting that gas to Europe through Nabucco instead of through Russian pipelines are correspondingly large. The need to get the gas from the eastern side of the Caspian over to the SCP and on to Nabucco generated the requirement for a trans-Caspian

pipeline. This has been hampered by Russian opposition and by disputes over ownership of the Caspian among all of the bordering countries. These disputes hinge on varying interpretations of old USSR – Iran treaties and on whether the Caspian is properly defined as a lake or a sea.²⁵

Russia has little interest in settling the issue because it does not want there to be a trans-Caspian pipeline. Instead, Russia has aggressively negotiated with Turkmenistan and Kazakhstan to increase the capacity and upgrade the condition of truck and pipeline distribution networks bringing natural gas to Russia.²⁶ Simultaneously Russia is trying to renew its profitable contract to receive gas from Turkmenistan.²⁷ And, in addition the competition for gas from Russia, China has made significant investments in central Asian energy sources, particularly in transportation infrastructure and oil and gas fields in Kazakhstan,²⁸ and in a gas pipeline running from Turkmenistan to China.²⁹ While Turkmenistan might want to provide gas to Russia, China, and Nabucco, its reserves are not so large that they can completely supply all three customers.³⁰

In spite of these problems in the Caspian region, there are some positive developments to give Nabucco some hope. While the legal status of the Caspian is a thorny issue, recent progress in talks between Turkmenistan and Azerbaijan has raised hopes that this obstacle to the trans-Caspian pipeline can be overcome. Turkmenistan also recently demonstrated a willingness to work with the Europeans when it signed an agreement with the German energy company RWE to develop sources of Turkmen gas and deliver it to Germany. This occurred after a Turkmen allegation that Russia's state controlled energy company Gazprom violated a contract and caused a pipeline rupture on Turkmen territory.³¹ These positive developments are enough to keep Nabucco's hopes for the trans-Caspian pipeline alive, but the previously mentioned obstacles will still make it very hard for Turkmen and Kazakh gas to reach Nabucco and eventually Europe.

Russia already has the infrastructure in place to move central Asian gas and its own gas to the borders of Europe. Therefore, the only Russian pipeline in question is the planned South Stream pipeline. South Stream is attempting to be the main competitor to Nabucco. The route is different because instead of coming through Turkey like Nabucco, South Stream is planned to cross the Black Sea from Russia to Bulgaria before splitting up and going to both southern Italy and Austria.³² In a similar manner as Nord Stream, South Stream utilizes Russian access to a body of water, in this case the Black Sea, to bypass Ukraine. Use of the Black Sea also eliminates the potential for any future conflict with transit countries like Turkey. In May of 2009 South Stream's lead companies, Russia's Gazprom and Italy's ENI SpA, announced a plan to double South Stream's planned annual capacity to 63 billion cubic meters (bcm),³³ also just about doubling the planned capacity for Nabucco of 31 bcm.³⁴ The gas needed to supply South Stream comes from Russia's own reserves and from any successful results coming out of the previously mentioned Russian efforts to buy up Azeri, Kazakh, and Turkmen gas.

4. THE RELATIONSHIP BETWEEN EUROPE AND RUSSIA

When examining where natural gas comes from and how it is transported it is important to remember some basic characteristics of the Europe-Russia relationship. The development of natural gas pipelines affects European relationships with Russia, but the Europe-Russia relationship also affects the development of the pipelines. A better understanding of how Europe and Russia understand themselves and each other should aid Europe in constructing a more complete strategy to achieve its energy security goals.

Stephen Blank identifies two sources of Russian antagonism towards the West. He sees these as a political system founded upon what German philosopher Carl Schmitt identified as a Russian "presupposition of enemies", and a perceived lack of respect from the US.³⁵ Claims that

the US is using the Organization for Security and Cooperation in Europe (OSCE) and even NGOs for anti-Russian purposes are used as support for this paranoia.³⁶ Russian fears and a desire to be respected help to explain the Russian propensity to view any European attempt to integrate with former Soviet countries as an unacceptable threat. This then causes Russia to use natural gas as a weapon to protect Russian interests. For example, Russia prohibits most European investment in its pipelines,³⁷ and the Russians also reacted angrily to an agreement between the EU and Ukraine for the EU to upgrade some of Ukraine's natural gas infrastructure.³⁸ This foreign investment would not be a problem if Russia would ratify the Energy Charter Treaty to protect and allow foreign investment by European and Russian companies in each others' energy systems.³⁹ Government mandates for Gazprom to provide subsidized gas to the Russian domestic market force Gazprom to accept heavy domestic losses and hinder investment in the Russian natural gas system,⁴⁰ so the Russian natural gas infrastructure could use the foreign investment. Unfortunately for foreign energy companies, Gazprom, and Russia, Russia views foreign investment in its natural gas system as a threat. Nord Stream and South Stream are exceptions to this policy, but the degree of control that these projects give Russia over the European gas supply and over Russia's neighbors more than compensates Russia for allowing some minority foreign investment in its pipelines. These pipelines are a part of the apparent Russian strategy to directly control as much of Europe's gas supply as possible while thwarting relatively small European attempts at gas supply diversification. If these efforts are successful Russia will have successfully fashioned natural gas into a weapon for commanding respect and cooperation from Europe and from the countries bordering Russia.

The EU recognizes that it is a group of 27 different countries facing competing domestic views of self-interest. Given the difficulty of gaining consensus among such a diverse group, it is unsurprising that individual countries protect their own energy companies and try to secure their own energy supply by allowing bilateral deals with Russia. This trend away from multilateralism can be seen not only in the participation of large western European energy countries in Russian pipelines, but in Russian success in reaching gas transit agreements with EU countries like Bulgaria, Hungary,⁴¹ and Greece.⁴² Europe was angered by the Russian invasion of Georgia, it is not pleased with Russia's progress on democracy and human rights, and the past gas shutoffs have helped to drive some European diversification into gas from Norway, Qatar, and Trinidad.⁴³ However, if Europe hopes to achieve any appreciable long term diversification away from Russian gas pipelines, it needs to develop a united and comprehensive strategy to bring to fruition Nabucco, its one potential non-Russian pipeline from.

Germany is the European country with the best relations with Russia, and Europe would be well served to take advantage of this relationship. Even during the height of the Cold War the Soviet Union and Germany worked together to connect themselves with natural gas pipelines,⁴⁴ so German support of Nord Stream is not without precedent. This uniquely positive attitude of Russia towards a European country is well demonstrated in a quote by Igor Yurgens, executive board chairman at the Institute of Contemporary Development in Moscow, which is led by Russian president Medvedev: "We do not have laws in this country, but we have a lot of friendships, and friendship is more important than laws. That's historically so. And with Germans, this is the case."⁴⁵ That this sort of quote could be made in spite of German anger over the Russian war against Georgia, and in spite of continued German insistence on human rights and democracy in Russia, indicates Germany may be in a position from which it can help

Nabucco to succeed. At its most basic level what Nabucco needs to gain momentum is firm commitments from European countries to buy specific quantities of gas, and firm commitments from south Asian countries to provide specific quantities of gas.⁴⁶ Germany has a legitimate interest in obtaining these commitments, as shown by the fact that the German company RWE is an investor in Nabucco,⁴⁷ and former German foreign minister Joschka Fischer is a consultant to the project.⁴⁸ A focused German effort throughout south Asia to obtain these commitments could provide Nabucco with badly needed momentum without overly antagonizing Russia. Another upside for Germany is that success would show Germany has the capability and the will to lead both within and outside the borders of Europe.

5. CONCLUSION

A variety of contentious issues divide Europeans among themselves and from Russia in a competition to control the supply of natural gas to Europe. This paper does not address every issue, such as the role of Liquefied Natural Gas imports or the potential impacts of energy market deregulation. Instead, it takes advantage of the publicity caused by recurring disruptions to the supply of gas coming through pipelines from Russia to highlight the most important issues affecting that supply. The main conclusion of this analysis is that Nord Stream is very likely to solidify European dependence on gas coming through Russian controlled pipelines.

Consequently, the only meaningful way for Europe to not become even further dependent on this Russian controlled supply is to secure significant contracts from the countries south of Russia to supply Nabucco instead of South Stream. Since Europe as a whole has made little progress in this effort, it may need to agree on the participation of an influential player like Germany to overcome internal divisions and opposition from Russia.

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